

## MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of: General Mills, Inc.)  
Minneapolis, Minnesota )  
)  
Proceedings Under Sections 17 and 18 )  
of the Minnesota Environmental )  
Response and Liability Act )

RESPONSE ORDER BY CONSENT

IT IS HEREBY STIPULATED AND AGREED by and among the parties hereto as follows:

A.

Jurisdiction

This RESPONSE ORDER BY CONSENT (Order) is issued pursuant to the authority vested in the Minnesota Pollution Control Agency (MPCA) by the Environmental Response and Liability Act of 1983 (ERLA), Minn. Stat. Ch. 115B, and Minn. Stat. Chs. 115 and 116.

On the basis of the results of the testing and analysis described in the Statement of Facts, infra, and MPCA files and records, the MPCA has determined that the previous apparent disposal of solvents in a General Mills, Inc. soil absorption pit located at 2010 East Hennepin Avenue in Minneapolis, Minnesota has given rise to a release of hazardous substances.

The MPCA has determined that: (1) the General Mills site (General Mills site) is a "facility" as defined in Minn. Stat. § 115B.02, subd. 5; (see Exhibit B for a legal description of the General Mills site); (2) General Mills, Inc. (General Mills) is a "person" as that term is defined in Minn. Stat. § 115B.02, subd. 12; (3) "hazardous substances" as defined by Minn. Stat. § 115B.02 have been detected at the General Mills site; (4) the migration and threatened migration of these hazardous substances into the ground water beneath the General Mills site constitutes a "release or threat of release" as that term

is defined in Minn. Stat. § 115B.02, subd. 15; (5) General Mills is a "responsible person" within the meaning of Minn. Stat. § 115B.03; (6) the actions to be taken pursuant to this Order are reasonable and necessary to protect the public health or welfare or the environment; (7) a reasonable time for beginning and completing the actions required by this Order has been provided for; and (8) General Mills has agreed to undertake the actions requested by the MPCA in this Order.

In signing this Order, General Mills does not admit, and retains the right to controvert in any subsequent proceedings, other than proceedings commenced to enforce this Order, the validity of any of the determinations made in Part A. of this Order. However, General Mills does hereby specifically agree to undertake all actions required of it by the terms and conditions of this Order within the time frames specified herein.

B.

Parties

This Order shall apply to and be binding upon the following parties:

1. General Mills, Inc; and
2. The Minnesota Pollution Control Agency.

C.

Statement of Facts

For purposes of this Order, the following constitutes a summary of the facts and estimates upon which this Order is based. None of the facts and estimates related herein shall be considered admissions by any party with respect to any claims unrelated to this Order.

1. From about 1930 until about 1977, General Mills operated a technical center and research laboratories at 2010 East Hennepin Avenue in Minneapolis, Minnesota. Food research was conducted at this property until 1947 when General Mills commenced chemical research in addition to the food research.

Recollections of former General Mills employees indicated that beginning in 1947, certain laboratory solvents from the chemical research operations may have been disposed of in a soil absorption pit (i.e., believed to be three 55-gallon drums that were perforated, stacked one on top of another, and buried with the bottom of the deepest drum 10 to 12 feet below the ground surface) located in the southeast portion of the General Mills site. Recollections of former General Mills employees indicate that disposal of certain laboratory solvents may have continued at the soil absorption pit at the General Mills site until approximately 1962, at which time General Mills ceased its use of the soil absorption pit. On August 31, 1977, Henkel Corporation purchased the property at 2010 East Hennepin Avenue from General Mills.

2. General Mills has estimated that as much as one thousand gallons of certain laboratory solvents per year were disposed of in the soil absorption pit.

3. Benzene; toluene; xylene; methyl isobutyl ketone; ethylbenzene; methylene chloride; 1,1,1-trichloroethane; 1,1,2,2-tetrachloroethane; 1,1,2-trichloroethane; 1,1,2,2-tetrachloroethylene; and chlorobenzene have been detected in the soils and ground water near the soil absorption pit.

These solvents are hazardous substances, as defined by ERLA, Minn. Stat. § 115B.02, Subd. 8.

4. On June 12, 1981, General Mills notified the MPCA of the soil absorption pit at 2010 East Hennepin Avenue and that General Mills had commenced an investigation of the soil absorption pit. Since that time, General Mills, in

consultation with the MPCA, has continued investigation of the soil absorption pit and surrounding soil and ground water in the area of the soil absorption pit.

5. The surficial soils near the soil absorption pit consist of two to eight feet of fill over peat. In general, the fill encountered consists mostly of silty sand. In some cases, gravel, silty clay, ashes, cinders, concrete, brick, and organic soils are present as fill. The thickness of the peat is generally from zero to ten feet. The peat is underlain by thirty to forty feet of alluvial fine to medium sand which comprises the drift aquifer. Directly beneath the General Mills site, as well as to the south and west, the alluvium is underlain by a basal clay till of varying thickness (from zero to ten feet), which may retard the downward movement of ground water. The Decorah Shale is the subcropping bedrock and retards the vertical movement of ground water if it is present at sufficient thickness. The Decorah Shale is underlain by the Platteville Limestone, which is the uppermost bedrock aquifer in the vicinity of the General Mills site. Ground water monitoring wells have been installed in the shallow drift aquifer and in both the Carimona and Magnolia Members of the Platteville Formation. The Carimona and Magnolia Members are separated by up to a 0.2 foot thick seam of bentonite which acts as a retarding layer between the two members. The three remaining Platteville members that lay below the Magnolia are the Hidden Falls, the Mifflin, and the Pecatonica Members. In total, the Platteville Formation is approximately twenty-five to thirty feet thick. The Platteville Formation is underlain by the Glenwood Shale which likely acts as a confining layer between the Platteville Formation and the underlying sandstone and dolomitic aquifers. The Glenwood Shale is underlain by the St. Peter Sandstone and the remaining formations of the Twin Cities Bedrock Basin.

6. The results of sampling and analysis of ground water from monitoring wells in the drift aquifer, the Carimona Member of the Platteville Formation, and the Magnolia Member of the Platteville Formation show that ground water contains one or more of the solvents listed in Attachment C of Exhibit A to this Order.

7. The investigations and studies to date indicate that there is little contamination in the unsaturated soils above the drift aquifer at the General Mills site. Solvents have been identified as present in the drift aquifer, the Carimona member of the Platteville Formation, and the Magnolia member of the Platteville Formation beneath the General Mills site.

8. The General Mills site is located adjacent to a residential area with private residences located within one block to the south, east, and west of the General Mills site and industries located within one block north of the General Mills site.

9. Analysis of ground water samples from five industrial wells located within a three quarter mile radius around the General Mills site have shown no detectable concentrations of the solvents listed in paragraph 3 above in four of the five wells tested and concentrations of the solvents listed in paragraph 3 above to be less than the drinking water quality criteria in the fifth well tested. Available information indicates that the wells are deep bedrock wells (between 340 and 1110 feet deep), with four of the wells completed in the Prairie du Chien/Jordan Formation and the fifth well in the Hinckley Formation.

10. Limited information has been obtained indicating that the St. Peter Formation (an aquifer) may also be contaminated although the extent, magnitude and source of that contamination are as yet uncertain.

11. Pursuant to Section 105(8)(b) of CERCLA, the General Mills site has been included on the National Priorities List by publication in the Federal Register on September 21, 1984, 49 Fed. Reg. 37070-37089 (1984).

## ORDER AND AGREEMENT

Based on the information available to the parties on the effective date of this Order, and without trial or adjudication of any issues of fact or law and without General Mills' admission of liability or responsibility, IT IS HEREBY ORDERED AND AGREED AS FOLLOWS:

### D.

#### Scope of Order

This Order shall govern the implementation of a Remedial Action Plan and also the development and implementation of an investigation of the St. Peter Formation to be undertaken with regard to the General Mills site. The Remedial Action Plan was selected in view of the nature of the solvents and their release.

Matters other than those described above are not within the scope of this Order. This Order specifically does not address any feasibility studies or response actions which may be necessary for the St. Peter Formation or any actions which may be necessary for deeper aquifers.

### E.

#### Remedial Action Plan and Remedial Action Implementation

General Mills shall implement the Remedial Action Plan (RAP) for the General Mills site. The RAP is set forth in Exhibit A to this Order and is hereby made an integral and enforceable part of this Order.

### F.

#### Resolution of Disputes

1. If a dispute arises as to the meaning of any part of this Order or concerning the implementation of the RAP, other than with respect to the

approval of submittals, General Mills shall provide the MPCA Director with a written statement supporting its position. The MPCA Director shall issue an order resolving the issues in dispute. If such order is in any way contrary to the position provided by General Mills, the MPCA shall provide General Mills with a written statement supporting its position. The order shall be considered a "final administrative action" of the MPCA regarding the issue in dispute. Each such final administrative action may be appealed to a court of competent jurisdiction.

2. In the event there is a dispute between the MPCA and General Mills regarding any submittal, document, report, schedule (collectively "submittal"), the dispute shall be resolved in the following manner.

a. The MPCA Director shall review all submittals made by General Mills as required by this Order within twenty-one (21) calendar days of receipt and notify General Mills in writing by the twenty-first calendar day, or the first working day thereafter, of his approval, disapproval, or modification of the submittal. In the event the submittal needs approval and it is approved, it shall become an integral and enforceable part of this Order. In the event that the submittal needs approval and it is disapproved in whole or part, the MPCA Director shall notify General Mills of the specific inadequacies in writing, and shall indicate the necessary amendments or revisions. In the event that the submittal may be modified, and it is modified, the MPCA Director shall notify General Mills of the specific modification(s) made to the submittal, and the reasons therefore.

b. Within fourteen (14) calendar days of receipt of any notice of disapproval, or modification of any submittal where a submittal needs approval or may be modified or on the first working day thereafter, General Mills shall (1) submit revisions to correct inadequacies, (2) respond to the modification,

or (3) General Mills shall state in writing the reasons why the submittal, as originally submitted, should be approved.

c. If, within fourteen (14) calendar days from the date of General Mills submittal under b, above, or the first working day thereafter, the parties have not reconciled all issues in disagreement, the MPCA Director may make any changes in the submittal as he deems necessary. Any changes shall be deemed "final administration actions" of the MPCA regarding this Order and may be appealed to a court of competent jurisdiction.

d. All submittals or MPCA Director modifications thereto shall be technologically feasible, cost effective and in accordance with sound engineering practice.

e. The MPCA and General Mills shall provide the opportunity to consult with each other during the review of submittals or modifications under this Part.

f. Failure of General Mills to comply with a modification made to a submittal pursuant to this Part shall not void the entire Order. The MPCA may, however, apply to a court of competent jurisdiction for an Order enforcing any modification made to any submittal.

3. During the resolution of any dispute under subparts 1 and 2 above, and during any subsequent judicial proceedings, General Mills, shall continue to implement the RAP in accordance with the terms and conditions existing immediately prior to the dispute. Such action by General Mills shall be considered in compliance with this Order.

4. The implementation and continuance of the RAP may require the issuance of governmental permits or orders (hereinafter referred to as ("permit")) some of which must be periodically renewed. This Order is based upon the expectation that the terms and conditions of said permits will be issued consistent with the



remedial activities contained in this Order and RAP.

If a permit is not issued or is issued containing terms and conditions directly affecting the implementation of the RAP which are significantly different than the terms and conditions set forth in the RAP, or in the case of a permit renewal, containing terms and conditions significantly different from those contained in the preceding permit, General Mills may notify the MPCA Director of its intention to propose modifications to the RAP. Notification of intention to propose modifications must be submitted within seven (7) days of General Mills being advised that a permit will not be issued or of the issuance of the permit, or a final judicial determination with respect to said issuance. General Mills shall submit any proposed modifications to the RAP within thirty (30) days of its notice of intention to do so. Within ten (10) days of the receipt of the proposed modifications, the MPCA Director shall review and provide written comments to General Mills on the modifications.

If there is disagreement concerning any portion of the proposed modifications, General Mills and the MPCA Director shall use their best efforts to resolve the differences. If the differences cannot be resolved within sixty (60) days of General Mills notice of proposed modifications, the MPCA Director shall notify General Mills in writing of the MPCA's position on the modifications which shall be considered final administrative action of the MPCA. If General Mills does not accept the MPCA's position, the MPCA Director and/or General Mills shall apply to a court of competent jurisdiction within thirty (30) days following the MPCA Director's notification for resolution of the differences on a de novo basis.

Any modifications to the RAP agreed to by the MPCA Director and General Mills shall become integral and enforceable parts of this Order.

During the review of any proposed modifications under this Part and during any subsequent judicial proceedings, General Mills shall continue to

implement the RAP in accordance with the terms and conditions of the previously issued permit as well as any terms and conditions of any new permit which are not in dispute, except to the extent that implementation of the terms and conditions of the previous permit conflict with those of the new permit or a refusal to issue a permit. General Mills shall not be assessed liquidated damages under Part U of this Order nor shall the MPCA seek such other penalties or take enforcement action as a result of any delays which are directly attributable to any changes in permit terms or conditions or refusal to grant a permit being addressed by this Part. In addition, any delays in the implementation of the RAP which necessarily result from the utilization of this Part shall not be considered to be in non-compliance with this Order.

General Mills agrees that it will not appeal a permit decision if General Mills has first sought a modification of the RAP based upon the terms and conditions of the permit as issued in accordance with the procedures of this Part.

G.

Creation of Danger

In the event the MPCA Director or General Mills determine that activities implementing or in non-compliance with this Order, or any other circumstances or activities, are creating a danger to the health or welfare of the people on the General Mills site or in the surrounding area or to the environment, the MPCA Director or General Mills may order General Mills to stop further implementation of this Order for such period of time as needed to abate the danger or may petition a court of competent jurisdiction for such an Order. During any stoppage of work under this paragraph, General Mills obligations with respect to the work ordered to be stopped shall be suspended and the time period for implementation of that work, as well as the time period for any other work

dependent upon the completion of the work which was stopped, shall be extended, pursuant to Part W. of this Order, for such a period as the MPCA Director determines is reasonable under the circumstances.

H.

Reporting

General Mills shall submit to the MPCA Director written monthly progress reports, during the construction of the monitoring wells and treatment systems. The Progress Report shall describe the action General Mills has taken pursuant to the RAP during the preceeding month. Progress reports shall also describe the activities scheduled to be taken during the upcoming month. The monthly reports shall continue until one (1) month following the first day of operation of the pump out system. Thereafter General Mills shall submit reports as required in the RAP. All reports shall be submitted by the fifteenth day of each month that a report is due. The progress reports shall include a detailed statement of the manner and extent to which the requirement and time schedules set out in Exhibit A are being met. Unless otherwise specified, progress reports and any other documents submitted pursuant to this Order shall be sent by certified mail, return receipt requested and addressed to:

Bruce S. Davis, Project Leader  
Division of Solid and Hazardous Waste  
Minnesota Pollution Control Agency  
1935 West County Road B-2  
Roseville, Minnesota 55113

I.

Project Leaders

The MPCA and General Mills shall each designate a Project Leader and at least one alternate for the purposes of overseeing the implementation of this Order. Within ten (10) days of the effective date of this Order, the Parties shall notify each other of the names and addresses of their Project Leaders and

alternates. The MPCA Project Leader is Bruce S. Davis. Any party may change its designated Project Leader or alternate by notifying the other parties, in writing, of the change. To the maximum extent possible, communications between General Mills and the MPCA concerning the terms and conditions of this Order shall be directed through the Project Leaders. Each Project Leader shall be responsible for assuring that all communications from the other Project Leaders are appropriately disseminated and processed.

The Project Leaders and alternates shall have at least the authority to (1) take samples or direct that samples be taken; (2) direct that work stop for a period not to exceed 24 hours whenever a Project Leader or alternate determines that activities at the General Mills site may create a danger to public health or welfare or the environment; (3) observe, take photographs, and make such other reports on the progress of the work as the Project Leader or alternate deems appropriate; and (4) review records, files, and documents relevant to this Order, that remain in the possession of General Mills. The MPCA Project Leader may also make field decisions within the scope of the RAP on the techniques, procedures, or design utilized in carrying out this Order which are necessary to the completion of the project. Any field modifications shall be approved orally by all Project Leaders. Within forty-eight (48) hours following the modification, the Project Leader who requested the modification shall prepare a memorandum detailing the modification and the reasons therefore, and shall provide or mail a copy of the memorandum to the other Project Leader.

#### J.

##### Sampling and Data Availability

The MPCA Director and General Mills shall make available to each other the results of sampling, tests, or other data generated by any of them, or on their behalf, which result from the implementation of this Order. At the request of

either party hereto, the party taking samples shall allow the other party to split or duplicate samples during the implementation of this Order.

The Project Leader for the party taking samples shall endeavor to notify the Project Leader of the other party not less than forty-eight (48) hours in advance of any well sample collection. If it is not possible to provide forty-eight (48) hours prior notification, the Project Leader for the party taking well samples shall notify the Project Leader of the other party as soon as possible after becoming aware that well samples will be collected.

K.

Retention of Records

General Mills shall retain in its possession all records and documents related to the disposal of hazardous substances at the General Mills site and all reports and data related to the implementation of the RAP. General Mills shall preserve these records, documents, reports and data for a minimum of three years after the termination of this Order despite any document retention policy to the contrary.

L.

Confidential Information

General Mills may assert a business confidentiality claim covering part or all of the information requested by this Order in the manner described by Minnesota Statutes Sections 116.075, 13.03 and 13.37. Analytical data shall not be claimed as confidential by General Mills. If information is determined confidential by the MPCA Director it shall be afforded protection under Minnesota Statutes Sections 116.075, 13.03 and 13.37. If no such claim accompanies the information when it is submitted to the MPCA Director, the information may be made available to the public by the MPCA without further notice to General Mills.

M.

Access

General Mills shall, within sixty (60) days of the effective date of this Order, provide the MPCA with copies of access agreements for the portions of the General Mills site upon which monitoring wells, pumping wells, or treatment facilities required by this Order are located. General Mills shall use reasonable efforts to obtain access agreements to all private property upon which monitoring wells, pumping wells, or treatment facilities required by this Order will be located. The access agreements shall provide authority for the MPCA or their authorized employees to enter portions of the General Mills site and all other private property upon which monitoring wells, pumping wells, or treatment facilities required by this Order will be located at all reasonable times and in accordance with the MPCA's statutory authority for the purpose of: reviewing the progress of General Mills in implementing this Order; conducting such tests as the MPCA Director or the MPCA Project Leaders deem necessary; and verifying the data submitted to the MPCA Director by General Mills. General Mills shall not be required to pay unreasonable access fees as part of its efforts to obtain access.

If General Mills is unable to obtain access using reasonable efforts, the MPCA agrees to exercise its authority under Minn. Stat. § 115B.17 subd. 4. to obtain access to property necessary to carry out this Order.

With respect to the General Mills site upon which pump out well(s) or treatment facilities are located pursuant to the Order, the access agreement shall also provide that no conveyance of title, easement, or other interest in the site shall be consummated without provision for the continued operation of the pump out well(s) or treatment facilities installed on the property pursuant to this Order.

N.

Hold Harmless Agreement

General Mills agrees to indemnify and save and hold the MPCA, their agents and employees harmless from any and all claims or causes of action arising from or on account of acts or omissions of General Mills its officers, employees, agents, or contractors in implementing the activities pursuant to this Order. General Mills shall have the right to control the defense against any claim or cause of action, or portion thereof, under this Part if General Mills agrees that this Part requires General Mills to indemnify and hold harmless the MPCA with regard to the claim or cause of action, or portion thereof. In such circumstances the MPCA agrees to assist General Mills in the defense of the claim or cause of action to the extent that the defense of the claim or cause of action is not inconsistent with this Order.

O.

Other Claims

Nothing herein is intended to release any claims, causes of action, or demands in law or equity against any person, firm, partnership, or corporation not a signatory to this Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, disposal, or release of any pollutant, contaminant, or hazardous substances at, to, or from the General Mills site.

The MPCA shall not be liable for any injuries or damages to persons or property resulting from acts or omissions of General Mills in implementing the activities pursuant to this Order nor shall the MPCA be held a party to any contract entered into by General Mills to implement the activities pursuant to this Order.

P.

Other Applicable Laws

All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable state and federal laws and regulations, including laws and regulations related to occupational safety and health unless exception is provided from such requirements. In the event there is a conflict in the application of federal or state or local laws or regulations, the more stringent of the conflicting provisions shall apply.

Q.

Recovery of Expenses

Within thirty (30) days of the effective date of this Order, General Mills shall pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota the sum of \$8,303.00 as reimbursement of the MPCA's expenditures incurred in connection with the investigation of the General Mills site. Payment of this sum shall be in full and complete satisfaction of all past monetary claims of the MPCA for expenditures made prior to the effective date of this Order.

General Mills also agrees to reimburse the Environmental Response, Compensation and Compliance Fund for reasonable and necessary costs incurred by the MPCA for any MPCA activities conducted in the implementation of this Order. Within thirty (30) days of the end of each calendar year, the MPCA will submit to General Mills itemized documentation of such MPCA expenses of the previous year. Following receipt of such itemized documentation General Mills shall pay, within sixty (60) days, into the Environmental Response, Compliance and Compensation Fund of the Treasury of the State of Minnesota the required sum not to exceed a total of \$5,000.00 per calendar year plus documented laboratory



costs. Any dispute arising under this Part shall be resolved pursuant to Part F. of this Order.

R.

Financial Responsibility

General Mills shall provide the MPCA Director within thirty (30) days after the effective date of this Order, proof of financial responsibility in the amount of three (3) million dollars to cover the projected costs of implementation of the RAP, monitoring and operation and maintenance of the pump-out systems. General Mills may use any method approved by the U.S. EPA under 40 CFR 264, Part H. and 40 CFR 265 Part H. of the Resource Conservation Recovery Act to meet the requirements of this Part.

S.

Liability Insurance

General Mills, within twenty (20) days of the effective date of this Order, shall provide the MPCA Director with current certificates of insurance certifying coverage for general liability with minimum limits of \$1,000,000.00 per occurrence with an annual aggregate of at least \$2,000,000.00, exclusive of legal defense costs, for bodily injury and property damage liability combined and containing the provision that the insurance shall not be cancelled for any reason except after thirty (30) days notice to the MPCA Director. These insurance limits are not to be construed as maximum limits. General Mills is solely responsible for determining the appropriate amount of insurance it should carry for injuries or damages resulting from its activities in the implementation of this Order.

T.

Covenant Not to Sue

In consideration for General Mills' performance of the terms and conditions of this Order, and in the absence of material facts showing a release or threatened release not evident on the effective date of this Order, the MPCA agrees that compliance with this Order shall stand in lieu of any administrative, legal, and equitable remedies including but not limited to civil penalties available to the MPCA regarding the release or threatened release of hazardous substances at the General Mills site other than for any release which may be identified in the St. Peter Formation or deeper aquifers; except that nothing in this Order shall preclude the MPCA from exercising any administrative, legal, and equitable remedies available to them to require additional actions by General Mills in the event that the implementation of the requirements of this Order are insufficient to remedy the release or threatened release of hazardous substances at the General Mills site.

U.

Liquidated Damages

General Mills shall pay into the Environmental Response, Compensation and Compliance fund of the Treasury of the State of Minnesota the sum of five hundred dollars (\$500) for each week that General Mills fails to make a submittal to the MPCA Director in accordance with the time schedules contained in Exhibit A to this Order or any modifications to any schedule, requested by General Mills and approved or modified by the MPCA Director. Upon determination by the MPCA that General Mills has failed to make a submittal referenced herein, the MPCA shall immediately give written notice to General Mills of the failure specifying the provision of the Order which has not been complied with. The liquidated damages shall accrue from the date on which the submittal was to have

been made. The damages under this Part shall cease to accrue upon the submission of the required submittal to the MPCA Director provided, however, that General Mills shall be excused from paying such damages if General Mills meets the final date for completion of all work required by this Order.

Any failure of General Mills to complete properly the requirements of this Order which results from circumstances beyond the reasonable control of General Mills including delays caused by the MPCA shall not be deemed to be a violation of its obligation and shall not make General Mills liable for the damages provided for in this Part. To the extent delay is caused by such circumstances beyond the reasonable control of General Mills, the time for performance hereunder shall be extended pursuant to Part W. of this Order. General Mills shall have the burden of demonstrating that the circumstances were beyond its reasonable control.

Nothing in this Part shall be construed as prohibiting or in any way limiting the ability of the MPCA to seek civil penalties available under ERLA for any noncompliance with this Order except for noncompliance with the schedule for making submittals to which this Part applies.

#### V.

##### Remedies For Noncompliance

Nothing herein shall waive the MPCA's right to enforce this Order under Minn. Stat. § 115B.17 and 115B.18 of ERLA or to take any action authorized by Minn. Stat. § 115B.04, 115B.17 or 115B.18 of ERLA or any other law, should General Mills fail to maintain compliance with this Order.

#### W.

##### Extensions of Schedules

Extension(s) of time schedules contained in this Order for a period not to exceed ninety (90) days may be granted by the MPCA Director. Extensions of

greater than 90 days must be approved by the MPCA Board as an amendment to this Order. Any such extension(s) may be requested by General Mills in writing and shall be granted only where General Mills has demonstrated to the satisfaction of the MPCA Director good cause for the extension(s). Except for delays resulting from actions under Part G or delays caused by failure of the MPCA to complete a review and notification within the time set forth in this Order, the burden shall be on General Mills to procure the approval of the requested extension(s) from the MPCA. A requested extension of a time schedule shall not be effective until approved by the MPCA Director/MPCA Board or granted by a court of competent jurisdiction.

X.

Amendment of Order

This Order may only be amended by a written agreement between General Mills, and the MPCA.

Y.

Successors

This Order shall be binding upon General Mills, its successors and assigns, and upon the MPCA, its successors and assigns.

Z.

Termination

General Mills may submit, along with the Annual Monitoring Report required by Section 1.9.2, Part II. of the RAP, a written request for termination of the Order when General Mills has determined that the work required by the Order has been completed. The provisions of this Order shall be deemed satisfied and terminated upon General Mills receipt of written notice from the MPCA Director that General Mills has demonstrated to the satisfaction of the MPCA, that all

the terms of the Order have been completed. Resolution of any dispute regarding a request for termination of the Order by General Mills shall be resolved pursuant to Part F.2. of this Order.

AA.

Effective Date

This Order is effective upon the date that MPCA Director signature is affixed to this Order.

BY THEIR SIGNATURES HEREON, THE UNDERSIGNED REPRESENT  
THAT THEY HAVE AUTHORITY TO BIND THE PARTIES THEY  
REPRESENT, THEIR AGENTS, CONTRACTORS  
AND SUBSIDIARIES

General Mills, Inc. by [Signature]  
Corporation Title: Vice President

10/23/84  
Date

[Signature]  
Chairperson, Minnesota Pollution Control Agency

10-23-84  
Date

DEPUTY [Signature]  
Director, Minnesota Pollution Control Agency

10/23/84  
Effective Date

# EXHIBIT A

## REMEDIAL ACTION PLAN

### TABLE OF CONTENTS

#### Page

#### PART I — GROUND WATER REMEDIAL ACTION PROGRAM

Introduction and Purpose . . . . .	1
1.0 Ground Water Pump-Out Systems . . . . .	1
1.1 Glacial Drift Pump-Out System . . . . .	2
1.1.1 Contaminant Capture Zone . . . . .	2
1.1.2 Pump-Out Well Locations . . . . .	2
1.1.3 Contaminant Capture Zone Modification . . . . .	3
1.1.4 System Effectiveness Monitoring . . . . .	4
1.2 Carimona Pump-Out System . . . . .	4
1.2.1 Contaminant Capture Zone . . . . .	4
1.2.2 Pump-Out Well Location . . . . .	5
1.2.3 Contaminant Capture Zone Modification . . . . .	5
1.2.4 System Effectiveness Monitoring . . . . .	6
1.3 Effluent Limitations of Water Discharge . . . . .	6
1.3.1 Glacial Drift Well 109 . . . . .	6
1.3.2 Carimona-Platteville Well 108 . . . . .	7
1.3.3 Glacial Drift Well 110 . . . . .	7
1.3.4 Glacial Drift Wells 111, 112, and 113 . . . . .	8
1.3.5 Water Treatment System . . . . .	8
1.4 NPDES Permit Application . . . . .	9
2.0 Implementation of Remedial Actions . . . . .	10
3.0 Magnolia Remedial Actions . . . . .	10

#### PART II - GROUND WATER MONITORING PROGRAM

Introduction and Purpose . . . . .	12
1.0 Monitoring Program . . . . .	12
1.1 Analytical Parameter List . . . . .	12
1.2 Quality Assurance/Quality Control Plan . . . . .	12
1.3 Water Level Monitoring . . . . .	13
1.4 Operation Monitoring . . . . .	13
1.4.1 Glacial Drift Monitoring . . . . .	14
1.4.2 Carimona Monitoring . . . . .	14

TABLE OF CONTENTS  
(Continued)

	<u>Page</u>
1.5 Post-Operational Monitoring . . . . .	15
1.6 Magnolia Monitoring . . . . .	16
1.7 St. Peter Monitoring . . . . .	16
1.8 Bedrock Well Monitoring . . . . .	19
1.9 Reporting . . . . .	19
 2.0 Implementation of Monitoring Program . . . . .	 20
  Attachment A -- Glacial Drift Pump-Out System . . . . .	  21
Attachment B -- Carimona Pump-Out System . . . . .	22
Attachment C -- Analytical PProgram Parameters . . . . .	23
Attachment D -- Water Level Monitoring Well Locations	
Carimona and Magnolia Wells . . . . .	24
Glacial Drift Wells . . . . .	25
 Attachment E -- Water Sampling Well Location	
Carimona and Magnolia Wells . . . . .	26
Glacial Drift Wells . . . . .	27

## PART I -- GROUND WATER REMEDIAL ACTION PROGRAM

### INTRODUCTION AND PURPOSE

The purpose of Part I of this Remedial Action Plan (hereinafter referred to as the "RAP") is to define and implement the procedures necessary for minimizing the further migration of volatile organic hydrocarbons and in particular trichloroethylene (TCE) detected near the General Mills absorption pit in the ground water in the glacial drift and the Platteville Formation, and to improve the quality of the ground water in the glacial drift and Platteville Formation in the area of the General Mills absorption pit. This RAP shall be implemented by General Mills, Inc. (hereinafter referred to as "General Mills") pursuant to Part E. of the Order, to which this RAP is appended and made an integral and enforceable part thereof.

### 1.0 GROUND WATER PUMP-OUT SYSTEMS

General Mills shall design, construct, and operate ground water pump-cut systems in the glacial drift and the Carimona Member of the Platteville Formation (Carimona) in accordance with the concepts set forth in the following Sections. General Mills shall, within 90 days of the effective date of the Order, submit a proposed Ground Water Pump-Out System Plan (Plan) to the MPCA Director for approval or modification in accordance with the concepts set forth in the following section pursuant to Part F. of the Order.

The proposed Plan shall contain the following Sections:

- 1.1 Glacial Drift Pump-Out System
- 1.2 Carimona Pump-Out System
- 1.3 Effluent Limitations of Water Discharge
- 1.4 NPDES Permit Application

The proposed Plan shall specify and provide detailed discussions (and engineering plans and specifications where appropriate) as to the methods to be utilized by General Mills to comply with the requirements specified in Sections



1.1 through 1.4 of Part I of this RAP. The proposed Plan shall also provide time schedules for implementation of each of the Sections 1.1 through 1.4 of Part I of this RAP.

1.1 Glacial Drift Pump-Out System

1.1.1 Contaminant Capture Zone.

General Mills shall propose in the Plan the design, construction methods, and operational parameters of a glacial drift ground water pump-out system to remove and treat contaminated ground water from the capture zone in the glacial drift. The capture zone for the glacial drift pump-out system shall be such that ground water in the glacial drift affected by the General Mills absorption pit having a TCE concentration of 270 ug/l or greater. The presently defined limit of the glacial drift ground water having TCE concentrations in excess of 270 ug/l is shown in Attachment A to this RAP.

1.1.2 Pump-Out Well Locations.

The glacial drift pump-out wells shall be placed to capture ground water in the glacial drift capture zone contaminated with TCE in concentrations in excess of 270 ug/l. The Plan shall have one glacial drift pump-out well located in the southeastern corner of the General Mills site (Well 109) and the remaining pump-out wells located downgradient of the General Mills absorption pit. One downgradient pump-out well shall be located in the vicinity of Como Avenue and 20th Avenues (Well 110), and the remaining wells shall be located

in the vicinity of Brook Avenue and 17th Avenue, and Rollins Avenue and 17th and 18th Avenues, (Wells 111, 112, 113). The approximate locations of the glacial drift wells are shown in Attachment A to this RAP. The approximate limits of the capture zone for this pump-out system are also shown in Attachment A to this RAP. The glacial drift pump-out wells shall be a minimum of 4 inches in diameter and shall be screened through the entire saturated thickness of the alluvium in the glacial drift. The Plan shall show the capture zone for the pump-out system and discuss the reasons for the proposed well locations and the operation of the glacial drift ground water pump-out system.

1.1.3 Contaminated Capture Zone Modification.

If, after operation of the glacial pump-out system, the TCE concentration in the glacial drift capture zone is reduced to below 270 ug/l in samples from any glacial drift monitoring or pump-out well, the operation of such pump-out system can at General Mills discretion be adjusted to exclude the area monitored by any such well. Samples shall be collected from the wells in any excluded area in conformance with Section 1.5 of Part II of this RAP, and the operation of the pump-out system shall be adjusted to capture ground water in the area monitored by any well where samples show a TCE concentration of 270 ug/l or greater.

General Mills shall notify the MPCA Director at least thirty (30) days in advance of any proposed modification to the

operation of the glacial drift ground water pump-out system. The MPCA Director shall review, and modify or approve the proposed modification pursuant to Part F. of the Order.

1.1.4 System Effectiveness Monitoring.

General Mills shall propose in the Plan the details of a program to monitor the effectiveness of the glacial drift ground water pump-out system. The effectiveness of the glacial drift ground water pump-out system shall be monitored by taking water level measurements from the network of wells specified in Section 1.3 of Part II of this RAP and collecting and analyzing ground water samples from a network of glacial drift monitoring wells as specified in Section 1.4.1 of Part II of this RAP.

1.2 Carimona Pump-Out System

1.2.1 Contaminant Capture Zone.

General Mills shall propose in the Plan the design, construction methods and operational parameters of a Carimona ground water pump-out system to remove and treat contaminated ground water from the capture zone in the Carimona. The capture zone for the Carimona pump-out system shall include that ground water in the Carimona affected by the General Mills absorption pit having a TCE concentration of 27 ug/l or greater. The presently defined limit of the Carimona ground water having TCE concentrations in excess of 27 ug/l is shown in Attachment B to this RAP.

1.2.2 Pump-Out Well Location.

The Carimona pump-out well shall be placed to capture all ground water in the Carimona capture zone contaminated with TCE in concentrations in excess of 27 ug/l. The Carimona pump-out system in the Plan shall include Well 108 located at the General Mills site as shown in Attachment B to this RAP. The predicted capture zone of this well is also shown in Attachment B to this RAP. The Plan shall show the capture zone for the Carimona pump-out system and discuss the reasons for the proposed well location and the operation of the Carimona pump-out system. The system effectiveness monitoring described in Section 1.2.4 of Part I of this RAP shall be used to determine if an additional well or a revised pumping rate from Well 108 is needed to achieve compliance with Section 1.2.1 of Part I of this RAP.

1.2.3 Contaminant Capture Zone Modification.

If, after operation of the Carimona pump-out system, the TCE concentration in the Carimona capture zone is reduced to below 27 ug/l in samples from any Carimona monitoring or pump-out well, the rate of pumping from such pump-out system can be adjusted to exclude the area monitored by any such well. Samples shall be collected from the monitoring wells in any excluded area in conformance with Section 1.5 of Part II of this RAP and the pumping rate from the Carimona pump-out system shall be adjusted to capture ground water in the area monitored by any well where samples show a TCE

concentration of 27 ug/l or greater.

General Mills shall notify the MPCA Director at least thirty (30) days in advance of any proposed modification to the operation of the Carimona ground water pump-out system. The MPCA Director shall review, and modify, or approve the proposed modification.

1.2.4 System Effectiveness Monitoring

General Mills shall propose in the Plan the details of a program to monitor the effectiveness of the Carimona pump-out system. The effectiveness of the Carimona pump-out system shall be monitored by measurements of water level in the wells specified in Section 1.3 of Part II of this RAP and by collecting and analyzing ground water samples from the network of Carimona monitoring wells specified in Section 1.4.2 of Part II of this RAP.

1.3 Effluent Limitations of Water Discharge

General Mills shall use a Best Professional Judgment (BPJ) of Best Available Technology Economically Achievable (BATEA) level of treatment, the RAP shall consist of the following:

1.3.1 Glacial Drift Well 109

A pump shall be installed in the glacial drift Well 109 near the absorption pit at the southeast corner of the General Mills site. This pump shall discharge water from this well

continuously at about 50 gallons per minute (gpm) or the maximum sustainable yield up to 75 gpm to the water treatment system. (See Section 1.3.5 of Part I).

1.3.2 Carimona-Platteville Well 108

A pump shall be installed in the Carimona-Platteville Well 108 near the absorption pit at the southeast corner of the General Mills site. This pump shall discharge water from this well continuously at about 50 gpm or the maximum sustainable yield up to 75 gpm to the water treatment system. (See Section 1.3.5 of Part I).

1.3.3 Glacial Drift Well 110.

A pump shall be installed in a new glacial drift Well 110 located in the vicinity of Como Avenue and 20th Avenues. This pump shall discharge water initially from this well at 50 gpm, or the maximum sustainable yield up to 75 gpm, to the storm water drainage system along Como Avenue. The water discharged from this well shall be sampled twice a month for three months and analyzed for TCE. If after three months of initial operation of this pump the concentration of TCE is more than 500 ug/l, General Mills shall prepare and submit a plan to the MPCA Director for discharging this water from Well 110 through a pipeline to the water treatment system on the General Mills site described below in paragraph 1.3.5. Construction of this pipeline shall be completed and in operation within three months after the necessary permits are obtained from the city of Minneapolis and the Burlington

Northern Railroad and after the approval of the pipeline plan by the MPCA Director and the ground is free of frost.

If after three months of initial operation of this well the concentration of TCE in the water discharged is 500 ug/l or less, the water may be discharged to the storm water drainage system.

1.3.4 Glacial Drift Wells, 111, 112 and 113

Pumps shall be installed in each of up to three (3) new glacial drift Wells 111, 112 and 113 to be located in the vicinity of Brook Avenue and 17th Avenue, and Rollins Avenue and 17th Avenue and 18th Avenue southeast as required to intercept the existing 270 ug/l contour for TCE in the glacial drift aquifer. Each of these pumps shall discharge water from these wells continuously at about 50 gpm or the maximum sustainable yield up to 75 gpm to the storm water drainage system in the vicinity of the wells. Construction of this pipeline shall be completed and in operation within three months after the necessary permits are obtained from the City of Minneapolis and the Burlington Northern Railroad and the approval of the pipeline plan by the MPCA Director and the ground is free of frost.

1.3.5 Water Treatment System

The water treatment system for water pumped from Wells 108 and 109, and 110 if required by Section 1.3.3 of Part I of this RAP, shall be located near the absorption pit at the southeast corner of the General Mills site. It shall consist

of a stripping column for air stripping volatile organic compounds (VOC) from water from Wells 108 and 109, and 110 if required by Section 1.3.3 of Part I of this RAP. The column shall be designed for 99% removal of total VOC based on pilot plant stripping tests of water from Well 108 and 109 at a total water discharge rate of about 150 gpm and using at least 3,000 SCFM of air. The treated water effluent shall discharge to the storm water drainage system on Talmage Avenue. This treatment system initially is expected to remove 98% of total VOC, with a daily minimum of 95% removal, but will not be required to produce an annual average effluent of less than 50 ug/l of TCE or a daily maximum of less than 100 ug/l of TCE. The air exhaust from the column will be discharged to the atmosphere at an elevation of not less than 25 feet above the ground.

Approval of detailed plans for the RAP and the subsequent draft of a National Pollution Discharge Elimination System (NPDES) permit submitted for public comment and any required air discharge permit from the MPCA shall be based on the above technology based conditions.

#### 1.4 NPDES Permit Application

General Mills shall apply for and obtain an NPDES permit for the discharge of ground water from the glacial drift and Carimona pump-out systems. General Mills has submitted to the MPCA Director as part of the Plan an application for such NPDES permit. General Mills has included in the permit application the information generated pursuant to Section 1.3 of Part I of this RAP.



## 2.0 IMPLEMENTATION OF REMEDIAL ACTIONS

General Mills shall implement the Ground Water Pump-Out System Plan as approved by the MPCA Director and in accordance with the concepts set forth in Section 1.0 of Part I of this RAP.

General Mills shall complete construction of the glacial drift pump-out wells, Carimona pump-out well, and the water treatment system as required by the Plan as approved by the MPCA Director and shall commence pumping within 180 days of issuance of the NPDES permit contemplated in Section 1.4 of Part I of this RAP or of the date the Plan is approved by the MPCA Director, whichever is later.

Termination of the ground water pump-out system in the glacial drift and the Carimona shall be governed by Part BB. of the Order.

## 3.0 MAGNOLIA REMEDIAL ACTIONS

On or before March 1, 1987 as part of the 1986 Annual Monitoring Report specified in Section 1.9.2. of Part II of this RAP, the water quality and water levels in the Magnolia unit shall be assessed to determine if the Carimona pump-out system has had any effect on the water quality in the Magnolia unit. The Magnolia data shall be reviewed to determine the extent of and the utility of the impact on the aquifer. If the pumping of the Carimona does not indicate either effective contaminant containment or contaminant removal in the Magnolia, remedial actions for the Magnolia, including increased pumping rates for the Carimona wells, shall be investigated and a proposal for remedial action shall be submitted to the MPCA Director along with the 1986 Annual Monitoring Report. Upon approval of the Remedial Action Plan by the Director, General Mills shall apply for an NPDES permit, if necessary, within 30

days and implement the remedial action plan within 90 days of receipt of an NPDES permit or upon receipt by General Mills of notification of approval.

On or before March 1, 1988 as part of the 1987 Annual Monitoring Report specified in Section 1.9.2 of Part II of this RAP, General Mills shall provide a summary of all the TCE data collected in the Magnolia Unit of the Platteville Formation (Magnolia) monitoring described in Section 1.6 of Part II of this RAP. If the original Carimona pump-out system, or any additional remedial action instituted pursuant to the preceeding paragraph, has resulted in TCE levels of less than 27 ug/l, no further action will be required by this Part for the Magnolia formation.

However, if the TCE concentration in ground water drawn from any of the wells in the Magnolia Unit shows a TCE concentration of 27 ug/l or greater, General Mills shall propose by March 1, 1988 remedial actions for the portion of the Magnolia with concentrations in excess of 27 ug/l of TCE for the MPCA Director approval in accordance with the concepts set forth herein for the Carimona, except no water treatment will be required for the Magnolia, pursuant to Part E. of the Order.

The Magnolia remedial action proposal shall provide for a Magnolia ground water pump-out system comparable to the Carimona ground water pump-out system specified in Sections 1.2.1 through 1.2.4 of Part I of this RAP.

General Mills shall apply for an NPDES permit or modification of the NPDES permit received pursuant to the Section 1.4 application to the MPCA Director as part of the March 1, 1988 proposal for Magnolia remedial actions. General Mills shall also commence remedial actions

required in the Magnolia within 90 days of issuance of the NPDES Permit or modification referred to in this section.

## PART II — GROUND WATER MONITORING PROGRAM

### INTRODUCTION AND PURPOSE

The purpose of the ground water monitoring program is to: (1) monitor the effectiveness of the ground water pump-out systems; (2) define changes in the distribution of volatile organic hydrocarbon concentrations listed in Attachment C to this RAP after this RAP is implemented; and (3) determine when operation of the pump-out system can be modified or terminated.

### 1.0 MONITORING PROGRAM

This Section describes the monitoring well network, sampling frequency, and analytical parameters that shall be used in the ground water monitoring program.

#### 1.1 Analytical Parameter List

General Mills shall analyze samples collected as part of the ground water monitoring program for the volatile organic hydrocarbons listed in Attachment C to this RAP pursuant to the time schedules established in Sections 1.4 through 1.6 of Part II of this RAP.

#### 1.2 Quality Assurance/Quality Control Plan

General Mills shall submit within 90 days of the effective date of the Order a proposed Quality Assurance/Quality Control Plan (QA/QC Plan) to be utilized in implementing the monitoring program. The proposed QA/QC Plan shall be prepared so as to be consistent with the requirements of the U.S. EPA's Contract Laboratory Program. The proposed QA/QC Plan shall specify the procedures for:

- a. sample collection;
- b. chain-of-custody;
- c. calibration in terms of accuracy, precision, and references (the QA/QC Plan shall also specify the number of times and intervals at which analysis equipment will be calibrated);
- d. laboratory analytical methods, including methods for ensuring accurate measurements of data in terms of precision, accuracy, completeness, and comparability;
- e. reporting;
- f. internal quality control;
- g. audits;
- h. preventive maintenance;
- i. corrective action; and,
- j. routine assessment of data precision, representativeness, comparability, accuracy, and completeness of specific measurement parameters involved.

### 1.3 Water Level Monitoring

General Mills shall measure water levels to the nearest 0.01 of a foot prior to the collection of each ground water sample required in this RAP. Water levels shall be measured in all existing monitoring wells and in the pump-out wells once every two (2) months during the first year of monitoring. The locations of the existing monitoring wells and proposed pump-out wells are shown in Attachment A to this RAP.

### 1.4 Operational Monitoring

The monitoring program described in this section shall be used by General Mills during the time the glacial drift or Carimona pump-out systems are operational.

#### 1.4.1 Glacial Drift Monitoring

##### 1.4.1.1 Monitoring Well Network.

The glacial drift monitoring well network shall include those wells numbered 1, 3, 4, and 107, and those wells lettered B, H, J, Q, R, S, T, U, V, W, X, Y, and Z. The locations of these wells are shown in Attachment E to this RAP.

##### 1.4.1.2 Sampling Frequency.

General Mills shall collect samples from the glacial drift monitoring well network specified in Section 1.4.1.1 of Part II of this RAP and each glacial drift pump-out well once every two (2) months for the first year of monitoring commencing in accordance with the implementation schedule specified in Section 2.0 of Part II of this RAP.

##### 1.4.1.3 Monitoring Parameters.

General Mills shall analyze all glacial drift ground water samples collected pursuant to Section 1.4.1.2 above for the compounds listed in Attachment C to this RAP on the 2nd, 6th, and 10th months and only TCE on the 4th, 8th and 12th months for the first year of monitoring.

#### 1.4.2. Carimona Monitoring

##### 1.4.2.1 Monitoring Well Network

The monitoring well network for the Carimona shall be Wells BB, II, LL, RR, SS, UU, WW, 8, 9, 10, 11,

12, and 13 located as shown in Attachment E to this RAP.

1.4.2.2 Sampling Frequency

General Mills shall collect samples from the Carimona monitoring well network specified in Section 1.4.2.1 of Part II of this RAP and the Carimona pump-out well(s) once every two (2) months during the first year of monitoring commencing in accordance with the implementation schedule specified in Section 2.0 of Part II of this RAP.

1.4.2.3 Monitoring Parameters.

General Mills shall analyze all Carimona ground water samples collected pursuant to Section 1.4.2.2 above for the compounds listed in Attachment C to this RAP on the 2nd, 6th, and 10th months and only TCE on the 4th, 8th and 12th months for the first year of monitoring.

1.5 Post-Operational Monitoring

As described in Sections 1.1.3 and 1.2.3 of Part I of this RAP, operation of the glacial drift and/or Carimona pump-out system may be adjusted to terminate operation of pump-out wells where the ground water monitoring data show that the concentration of TCE in the ground water has been reduced below the levels specified in Section 1.1.3 and/or 1.2.3 of Part I of this RAP. The frequency of sampling shall remain as set forth in Section 1.4 of Part II of this RAP for the remainder of that monitoring year. Any changes in the glacial drift

and/or Carimona ground water monitoring program shall be proposed by General Mills in the annual monitoring report as specified in Section 1.9.2 of Part II of this RAP.

## 1.6 Magnolia Monitoring

### 1.6.1 Monitoring Well Network.

The monitoring well network for the Magnolia shall be Wells QQ, OO, TT, VV, and ZZ, located as shown in Attachment E to this RAP.

### 1.6.2 Sampling Frequency.

General Mills shall collect samples from the Magnolia monitoring well network specified in Section 1.6.1 of Part II of this RAP once every two (2) months during the first year of monitoring commencing in accordance with the implementation schedule in Part 2.0 of Part II of this RAP.

### 1.6.3 Monitoring Parameters.

General Mills shall analyze all Magnolia ground water samples collected pursuant to Section 1.6.2 above for the compounds listed in Attachment C to this RAP on the 2nd, 6th, and 10th months and only TCE on the 4th, 8th and 12th months for the first year of monitoring.

## 1.7 St. Peter Monitoring

General Mills shall, within sixty (60) days of the effective date of this Order, submit a proposal to continue an investigation of the extent of ground water contamination in the St. Peter Formation and submit a proposed St. Peter Monitoring Plan to the MPCA Director for modification and approval pursuant to Part F. of the Order.

The proposed St. Peter Monitoring Plan shall contain the following Sections:

1.7.1 Monitoring Well Network

In addition to the existing St. Peter dewatering well constructed by the City of Minneapolis located in the vicinity of the intersection of Como Avenue and 19th Avenue S.E., and the St. Peter monitoring well constructed by General Mills in the vicinity of the intersection of Kennedy Street and Hoover Avenue S.E., General Mills shall construct two (2) additional St. Peter monitoring wells. The location of these two wells shall be generally southwest of the soil absorption pit at the General Mills site and on either side of the contaminant plume in the Glacial Drift as shown on Attachment A to this RAP. One of these wells shall be located in the vicinity of the intersection of Elm Street S.E. and 19th Avenue S.E. and the other in the vicinity of the intersection of Como Avenue S.E. and 15th Avenue S.E.

1.7.2 Monitoring Well Design

The design for construction of the St. Peter monitoring wells shall be in accordance with the Minnesota Department of Health well code, and as outlined in "Specifications for St. Peter Monitoring Well Installation" for General Mills site by Barr Engineering Co., dated July 1984 for the existing St. Peter monitoring well in the vicinity of the intersection of Kennedy Street S.E. and Hoover Avenue S.E.



1.7.3 Sampling Frequency

General Mills shall propose in the St. Peter Monitoring Plan the frequency for collecting ground water samples from the St. Peter monitoring wells. At a minimum, the St. Peter monitoring wells shall be sampled once every two (2) months during the first year of monitoring commencing in accordance with the implementation schedule specified in Section 2.0 of Part II of this RAP.

1.7.4 Monitoring Parameters

General Mills shall analyze all St. Peter Formation ground water samples for the compounds listed in Attachment C to this RAP on the 2nd, 6th, and 10th months and only TCE on the 4th, 8th, and 12th months for the first year of monitoring.

1.7.5 Monitoring Well Installation

General Mills shall complete installation of the St. Peter monitoring wells within thirty (30) days of the MPCA Director's notification of approval of the St. Peter Monitoring Plan.

1.7.6 Report

General Mills shall within sixty (60) days after completion of the first year of monitoring the St. Peter wells, prepare and submit a St. Peter monitoring report to the MPCA Director detailing the data and results of the St. Peter monitoring. This report shall present all data, analytical results, boring logs, and shall include a discussion of the extent and magnitude of contamination by compounds listed in Attachment C to this RAP in the St. Peter Formation, attributable to the General Mills site.

### 1.8 Bedrock Well Monitoring

The existing Prairie du Chien/Jordan well owned by the Henkel Corporation on the General Mills site shall be sampled by General Mills once each year. Samples shall be analyzed for the compounds listed in Attachment C to this RAP. Monitoring of the ground water in the Prairie du Chien/Jordan well on the General Mills site shall continue for as long as the Carimona and/or Magnolia pump-out systems are operated.

### 1.9 Reporting

#### 1.9.1 Monitoring Reports.

General Mills shall submit the analytical results to the MPCA Project Leader by the fifteenth day of the month following completion of all analyses of samples taken during the previous bimonthly sampling period.

#### 1.9.2 Annual Monitoring Report.

General Mills shall submit an annual monitoring report for the previous calendar year to the MPCA Project Leader on or before March 1, 1986 and each March 1 thereafter from the effective date of this Order until this Order is terminated.

Each annual report shall contain the following information.

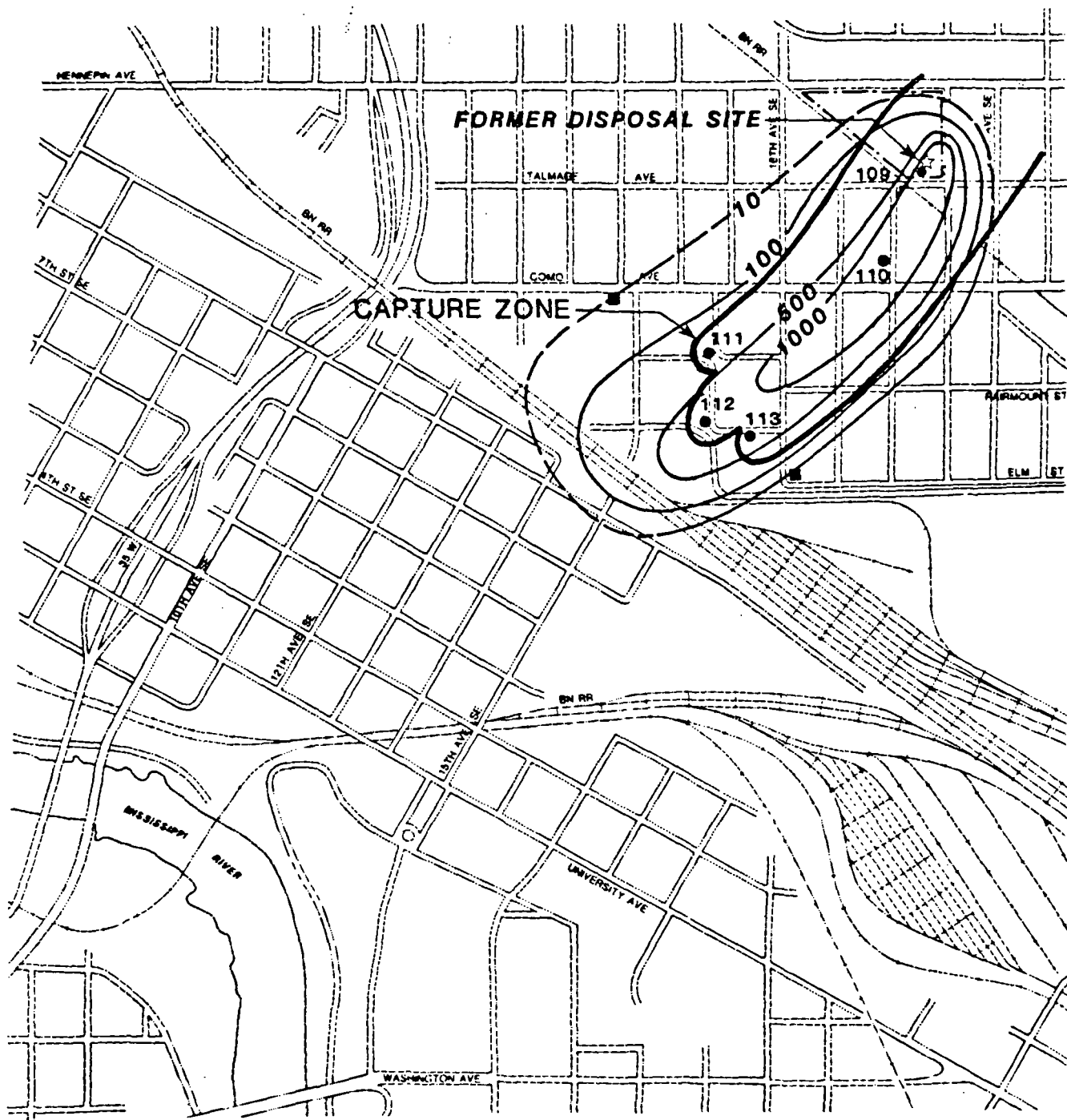
- a. results of all water level measurements and chemical analyses for the previous calendar year.
- b. water level contour maps for each formation showing high and low ground water levels;

- c. maps showing the sum of the compounds listed in Attachment C to this RAP analyzed for at each well location for each sampling event and maps showing the TCE concentrations analyzed for at each well location for each sampling event;
- d. a proposed sampling plan for the next monitoring year with an assessment of the monitoring parameters and frequencies and the feasibility for the deletion of monitoring wells or parameters or a decrease in sampling frequency.
- e. a discussion and summary of the reporting year's data in comparison to previously available data.

## 2.0 IMPLEMENTATION OF MONITORING PROGRAM

General Mills shall implement the ground water monitoring program described in Section 1.0 of Part II of this RAP, in accordance with concepts set forth in said Section 1.0.

General Mills shall commence the first year's monitoring of the ground water as specified in Sections 1.4 through 1.8 of Part II of this RAP within 180 days of issuance of the NPDES permit or of the date the Plan is approved by the MPCA Director, whichever is later.



- St. Peter Monitoring Well
- Glacial Drift Pump-out Well
- 50 — Contour of the Sum of Organic Volatile Concentrations (ug/L)

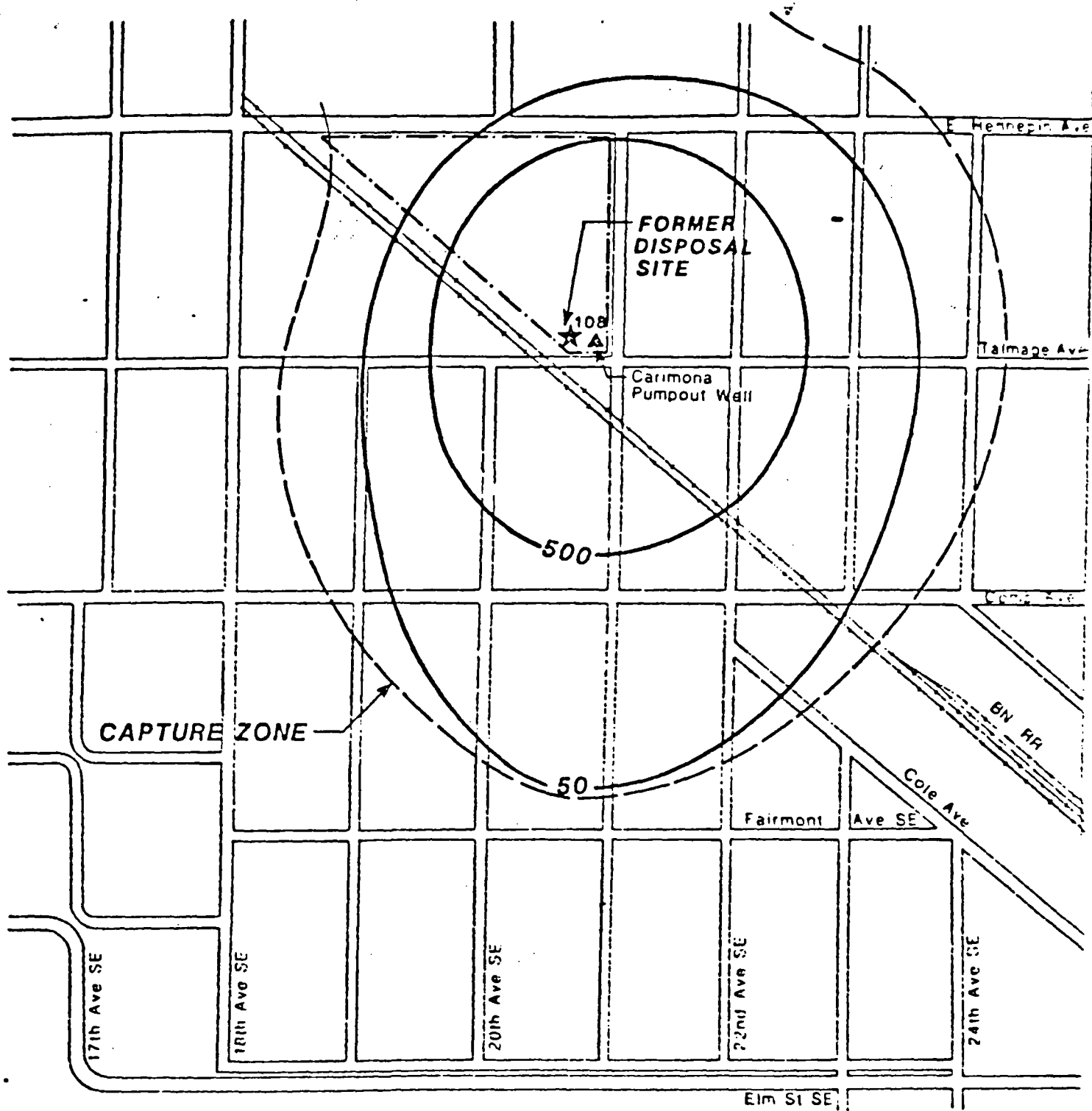
0 500 1000  
Scale in feet

**ATTACHMENT A**  
**GLACIAL DRIFT**  
**PUMP-OUT SYSTEM**

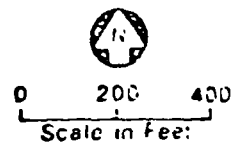
EXHIBIT B

LEGAL DESCRIPTION OF GENERAL MILLS SITE

The triangularly shaped portion of Lot 15, Block 1 of Elwell and Higgins Addition, City of Minneapolis, beginning at the judicial marker at the southwest corner of Lot 15, thence northwesterly along the west line of Lot 15 to the next judicial marker on that course (estimated distance 40-45 feet), thence east along the north line of Lot 15 a distance of 39.45 feet, thence south 33.27 feet to the place of beginning.



— Contour of the Sum of the  
Volatile Organic Concentrations (ug/L)



ATTACHMENT B  
CARIMONA  
PUMPOUT SYSTEM

## ATTACHMENT C

### ANALYTICAL PROGRAM PARAMETERS

#### Chlorinated Volatile Solvents

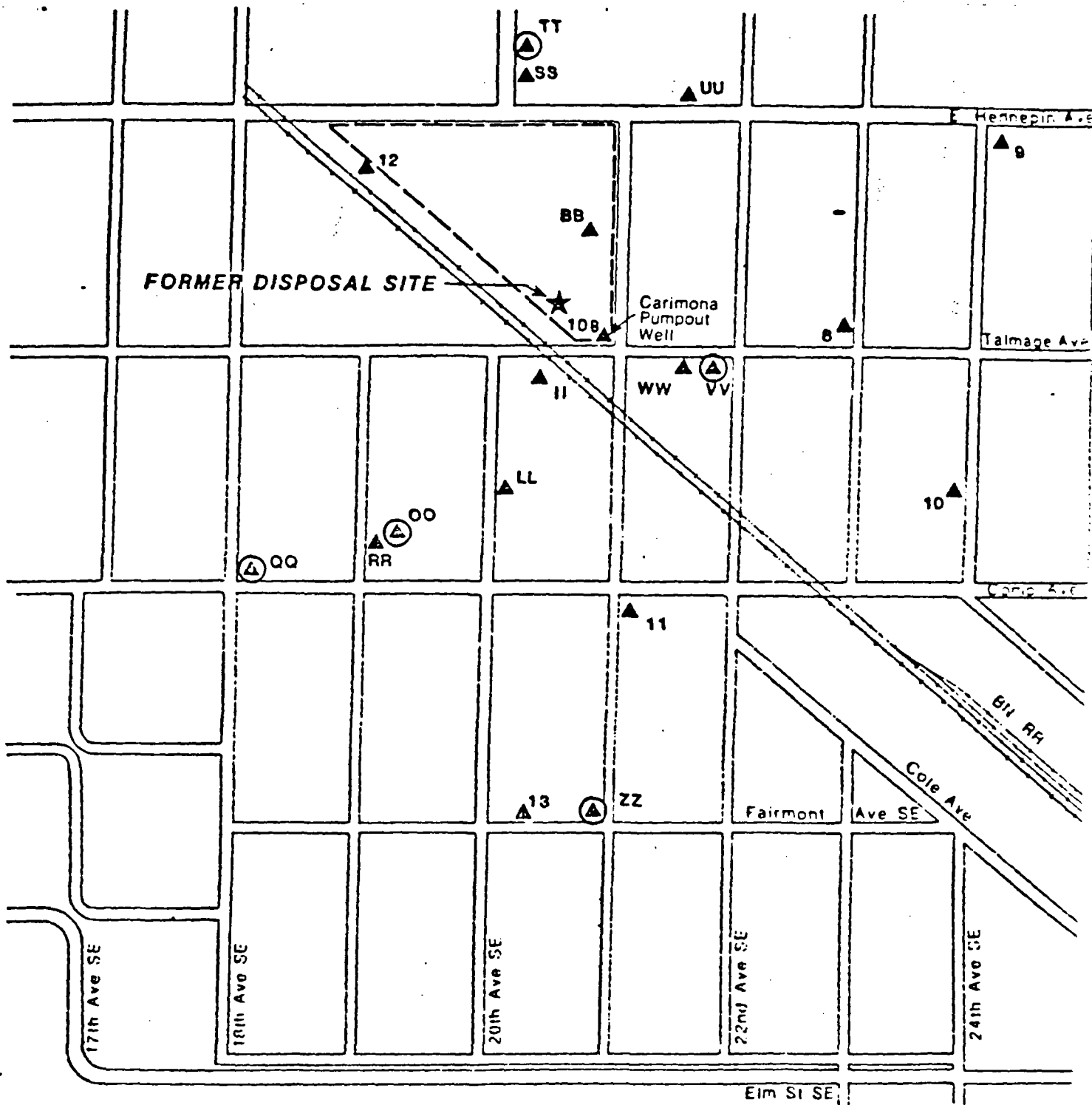
1,1-Dichloroethane  
1,2-Dichloroethane  
1,2-Dichloroethylene, cis  
1,2-Dichloroethylene, trans  
1,1,2,2-Tetrachloroethane  
Tetrachloroethylene  
1,1,1-Trichloroethane  
Trichloroethylene

#### Non-Chlorinated Volatile Solvents<sup>1</sup>

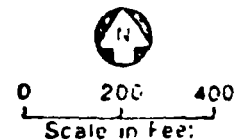
Benzene  
Toluene  
Xylenes

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<sup>1</sup>Analyzed only on samples from glacial drift.

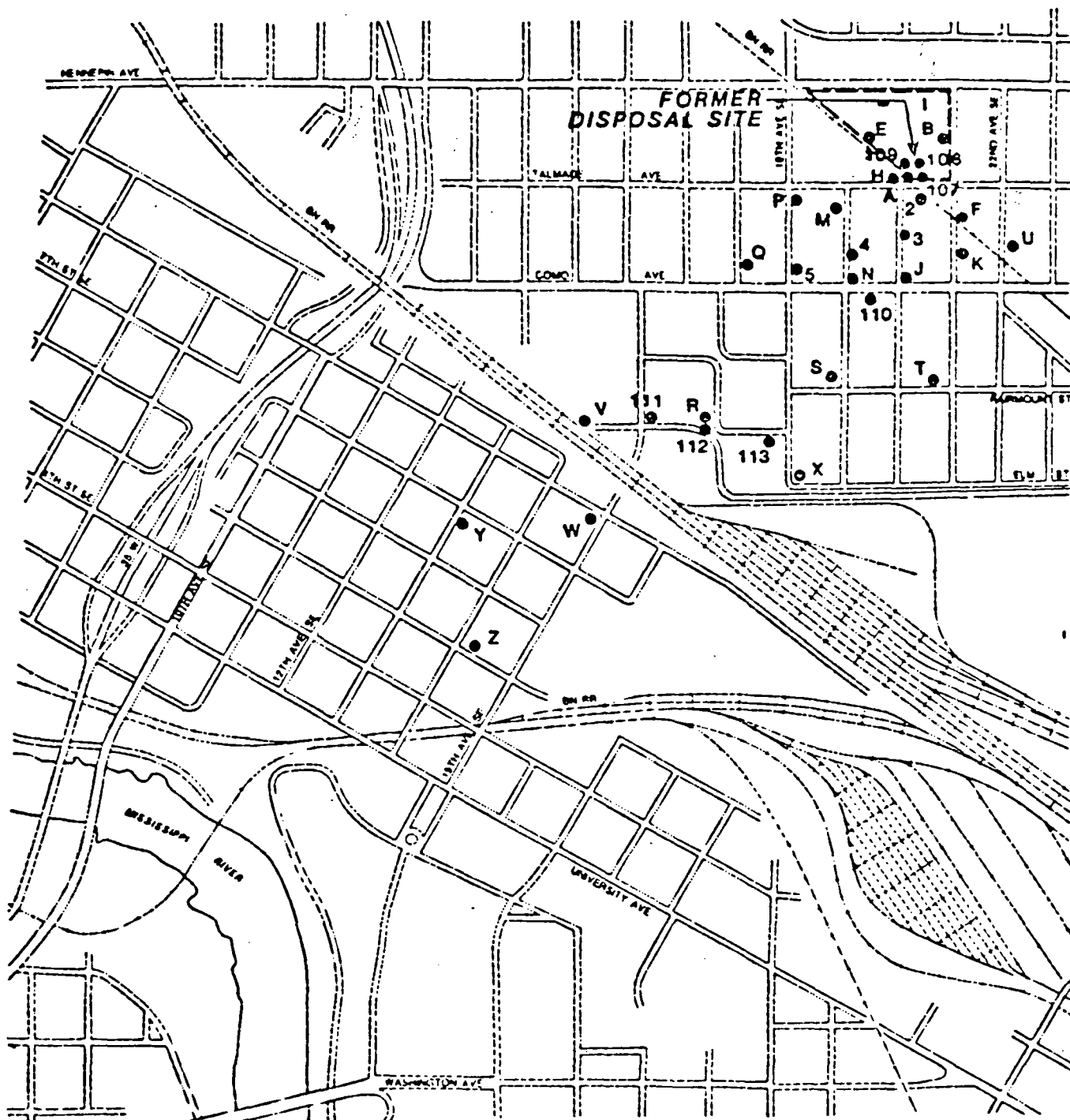


- ▲ Platteville Piezometer (Carimona)
- ⊙ Platteville Piezometer (Magnolia)

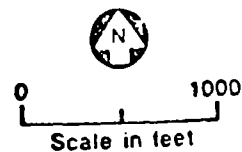


# ATTACHMENT D CARIMONA & MAGNOLIA WATE LEVEL MONITORING WELLS

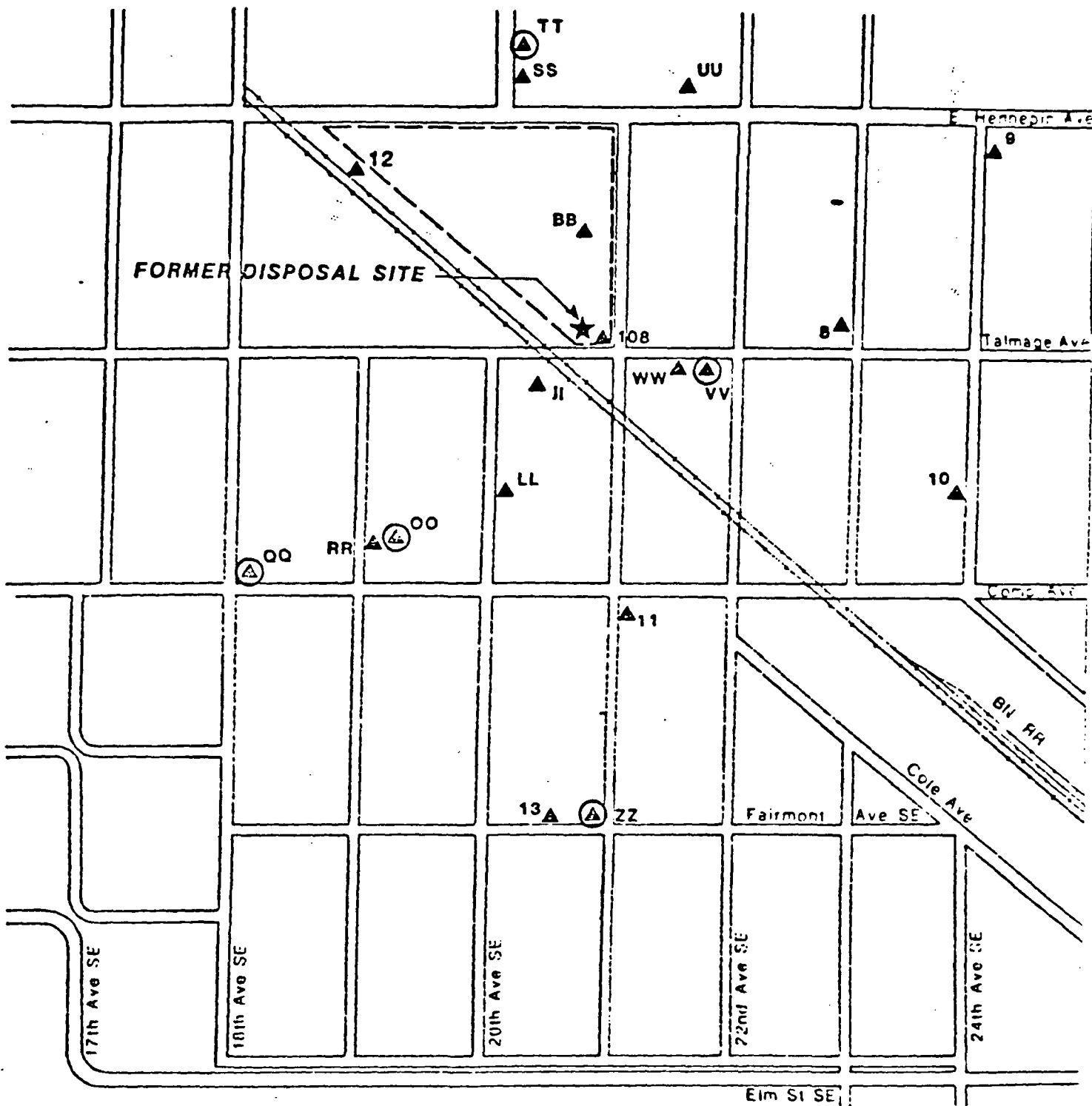




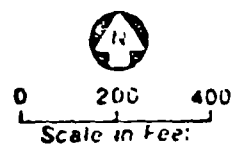
● Glacial Drift Wells



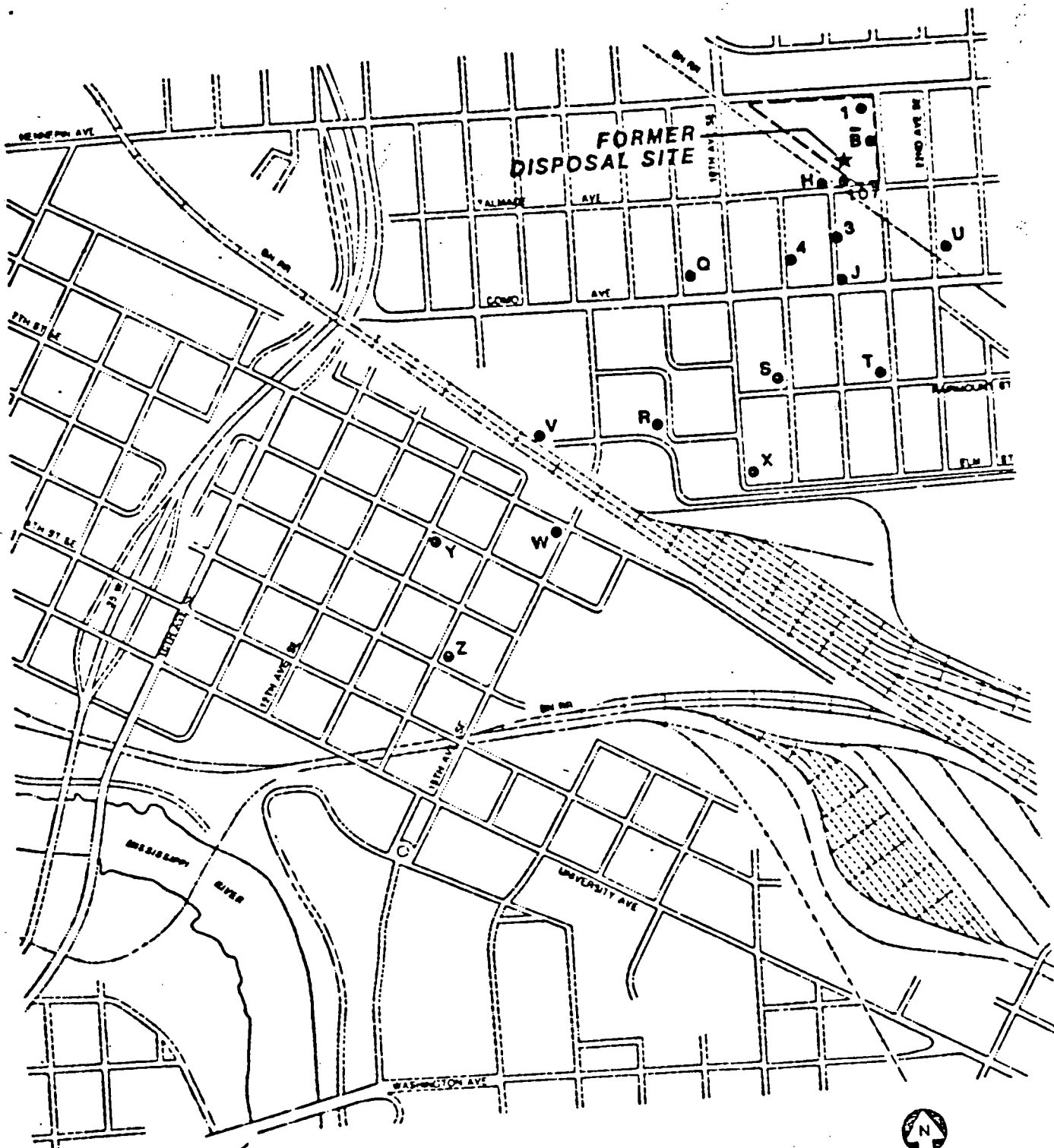
ATTACHMENT D (Cont.)  
GLACIAL DRIFT WATER  
LEVEL MONITORING WELLS



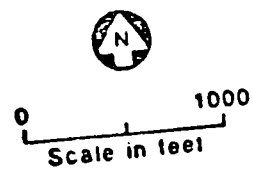
- ▲ Platteville Piezometer (Carimona)
- ⊙ Platteville Piezometer (Magnolia)



# ATTACHMENT E CARIMONA & MAGNOLIA SAMPLING WELLS



● Glacial Drift Well



ATTACHMENT E (Cont.)  
GLACIAL DRIFT SAMPLING WELLS